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Atty. Docket No. YOR920000167US1
(590.013)

REMARKS

In the Office Action dated July 28, 2005, pending Claims 1-19 were rejected and the rejection made final. Of these claims, Claims 1, 9, 10, 18, and 19 are independent claims; the remaining claims are dependent claims. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks. These remarks aim to clarify the distinctions between the applied art and the instant invention, specifically those distinctions that are exemplified in the claim language presented.

Claims 1-19 stand rejected under 35 USC 102(e) as being anticipated by Parthasarathy et al. (hereinafter "Parthasarathy"). Reconsideration and withdrawal of the present rejection is hereby respectfully requested.

As presently written, Independent Claims 1, 9, 10, 18, and 19 recite "determining a target discriminant based on the identity claim and on at least one target voiceprint model relating to a target individual; determining a background discriminant based on the identity claim and on at least one background model relating to at least one background individual; determining a score based on the target discriminant and the background

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discriminant; and accepting or rejecting the identity claim based on the determined score.”

Among the numerous distinctions between the present invention and Parthasarathy, it is respectfully submitted that there is no teaching or suggestion in Parthasarathy to accept or reject the identity claim based on the determined score. Rather, in Parthasarathy, for each of the N best models, speaker-independent scores and speaker-dependent scores are generated. The two scores for each model are combined, and a putative identity is chosen from the highest combined score. The putative identity is verified to be authenticated or rejected based on whether the difference between the two scores for that identity is above a certain threshold. This is in stark contrast to the present invention, in which one score is generated from one target determinant and one background determinant which is based on one or several background models (background speakers). Individual scores or determinants are NOT generated for EACH background speaker. Further, only one score is used to determine whether or not to accept or reject the identity claim. Thus, this precludes anticipation of the claimed invention, since “[a] claim is anticipated only if each and every element as set forth in the claim is found...”. *E.g., Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

While it is clear the reference fails to anticipate the Independent Claims and, therefore, the dependent claims as well, for the reasons set forth above, there are several additional differences between Parthasarathy and the present invention. Some of these differences will now be discussed.

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It is noted in the Office Action (Page 3, item 7) that several features, "such as the discriminant, the weight vector, and the permutation matrix, are not recited in the rejected claim(s)". It is respectfully submitted that the features in contention are all presented in the rejected claims. Specifically, the discriminant appears in all of the independent claims, as well as several dependent claims. The weight vector and the permutation matrix are claimed in Claim 2, 11, and several other dependent claims. The distinctions between Parthasarathy and the instant invention, as related to these terms and others, will be clarified below.

Relating to the rejections of Claims 2 (11), 3 (12), 4 (13), and 5 (14) Parthasarathy fails to teach a "background profile" or a "weight vector." As explained in the application, at least one embodiment of the present invention can be said to create a "target dependent background profile 325 which adapts the background population to the target." (Page 9, lines 12-13). Furthermore, "[t]he target discrimination will preferably be given directly by the voiceprint 330, while the background profile will be used subsequently to construct a target dependent background discrimination function." (Page 9, lines 16-18) There is no corresponding background profile teaching in the reference. Additionally, Parthasarathy fails to teach a background discriminant constructed by applying a pre-determined "profile" to a population of background models as conceptualized by the present invention. In addition, no weight vector is disclosed by Parthasarathy.


In view of the foregoing, it is respectfully submitted that Claims 1, 9, 10, 18, and 19 fully distinguish over the applied art and are thus in condition for allowance. By

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dependence on allowable Independent Claims 1 and 10, it is respectfully submitted that Claims 2-8 and 11-17 are also in condition for allowance.

In summary, it is respectfully submitted that the instant application, including Claims 1-19, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. In the unlikely event the Office does not agree the application is in condition for allowance, the Office is invited to call the undersigned to discuss the claims.

Respectfully submitted,



Stanley D. Ference III
Registration No. 33,879

Customer No. 35195
FERENCE & ASSOCIATES
409 Broad Street
Pittsburgh, Pennsylvania 15143
(412) 741-8400
(412) 741-9292 - Facsimile

Attorneys for Applicants